



Water-based Heat Transfer Ink 3422

Technical Data Sheet

Smiley 3422 CARETRANS® Water Based inks are used in the production of highly washable, highly stretchable, single & multi-colour transfers for underwear, sportswear & casual wear. Products are available in either CARETRANS® Performance 3422-ES extra stretch specifically formulated for tagless applications; or as 3422-HS High Stretch for Sportswear / Block area applications where drying performance / screen stability is critical.

- Excellent performance
- Excellent durability
- Wash and dry clean resistance properties on wide range of fabrics
- Transfers are Soft & Flexible on suitable substrates
- Wash Resistances up to 60°C dependant on adhesive
- Superior Wet / Dry Rub properties
- Excellent screen stability
- V.O.C. Free
- Water Based Pigmented Ink System
- Excellent Scratch & Scuff resistances
- Excellent Cut & Fold properties
- Non UV curing system

Substrates:

- Highly stretchable fabric such as sportswear, underwear and casual wear

USER INFORMATION

Usage:

Suitable for use on Manual, Semi-Automatic & Fully Automatic Machines.

All inks should be thoroughly mixed prior to use as settling of the ink may occur during transportation & storage. Use as a 2-pack ink system with Cross Linker Aqua (3422-386) at 3.0% in white and 3.5% in colours for maximum durabilities.

All 2-pack inks will IRREVERSIBLY HARDEN after mixing. When printing is completed, or if printing is interrupted for more than 15 minutes, the screen mesh, screen machinery & equipment used must be thoroughly cleaned to prevent permanent damage.

The "Pot-life" of the 2-pack ink is between 6-8 hours. "Pot-life" is dependent on temperature & humidity levels.

For further information refer to CARETRANS 2-pack Mixing Instructions.

Optimum Resistances will be achieved a minimum of 72 hours after printing.

For maximum opacity, print without the addition of any CARETRANS additives.

USE IN WELL VENTILATED AREAS.

Heat Curing:

Dry the printed sheet in a drying tunnel at 150°C for 60 seconds, or on drying racks in a drying room with extraction at 100°C for 15 minutes or air dry for 15 minutes.

Ensure the print is completely dry before continuing.

Additives:

Ink becomes thick due to ink drying / evaporation	add water	□	10%
Ink dries too fast in the screen &/or small designs	add Retarder	(3422-401)	5%
Ink dries too fast / high ambient temperature	add Strong Retarder	(3422-402)	3%
Excessive bubbling caused when mixing	add anti-foam	(3422-800)	1%
Pin-holing occurs when printing	add wetting agent	(3422-801)	1%

Supplied:

As a Mixing Range - Black, Opaque White, Clear, 9 Base Colours & 5 Fluorescent Colours (FREE Formula guide to match any International Matching System available)

Use the CARETRANS ink coding system to find out your required colour reference code.

Inks are available in 5kg & 200kg pack sizes.

Cross Linker Aqua (3422-386) is available in 5Kg & 25kg pack sizes. Ink and Cross Linker are supplied separately.

Metallic Golds, Pearlescent & Glitter inks are supplied separately as Metallic Vehicle with Paste/Powder/Glitter.

Metallic Golds will have a "Pot-life" of 10-30 days after mixing, after which discolouration may occur.

CARETRANS Stretch Blocking Black ink 3422-001 SB has been specially formulated to prevent Sublimation Dye strike through with transfers.

Cleaners:

CARETRANS® Performance Cleaner 3422-400 for cleaning all Screen & Machine Parts.
Available in 5L, 25L & 200L pack sizes.

Environmentally friendly & Hypo-Allergenic Citrus Hand Cleaner 99-10-HCC
Available in 5kg & 15kg pack sizes.

6070-200 stripping powder can be used to strip the screen emulsion & allow re-imaging.
Available in 5Kg pack sizes.
DO NOT PUT CLEANERS INTO INK

Shelf Life:

Minimum of 24 months.
For maximum shelf life, keep containers closed and store in a cool environment between 5°C (41°F) and 35°C (95°F), out of direct sunlight and away from any heat sources.

Ensure the plastic sheet is replaced onto any unused ink in the container to prevent skinning
Security inks have a shelf life of only 6 months when stored in the above conditions

Notes:

Colour Matching Service available
The Mixing ratios of Metallic Vehicle, Metallic Paste, Glitter or Pearlescent Powders, may vary depending on the colour required & on the substrate to be printed. It is therefore recommended to weigh out each component prior to mixing / printing.

Products should be thoroughly mixed prior to use as settling of the ink may occur during transportation & storage.

All Products supplied in bulk quantities & require weighing out prior to mixing / printing as the ratios may vary dependant on colour & substrate to be printed.

Screen Emulsion must be suitable for use with a Water Based ink system. 6061-015 and Screen Hardener 6050-101 & 6050-107 recommended

For Screen flat bed printing, it is recommended that a medium (Shore hardness 70-75°) square-edged squeegee be used in conjunction with a standard 90T (229 threads/inch) mesh printing screen, although finer mesh can be used for fine text & coarser mesh (61T – 36T) can be used for backing white and adhesive.

CARETRANS® Performance Cleaner 3422-400 may cause staining on parts which include Aluminium.

CARETRANS® Test Specifications & *Declarations are available on request.

Quality Control tests carried out to SMILEY® specifications unless otherwise agreed prior to supply of product.

Please use the contact details below for further assistance or information
Minimum ordering quantity, 5kg per colour.

Coverage:

Coarser meshes 42T (107 threads/inch) can be used for bold designs. Finer meshes 120T (305 threads/inch) can be used for small / intricate designs.
Typical all over coverage of release coated films & papers can range from 10-12m²/kg.

Coverage is dependant on ink colour, screen mesh size and hole configuration, the ink viscosity and pressure applied to the screen whilst printing. Higher pigmented colours such as white & colour matches containing a high proportion of white will not yield the same coverage.

Safety:

Refer to the specific SMILEY® Material Safety Data Sheets for information on the safety & handling of this particular range of inks, available on request.